



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Keiiti Ogura et al.
Serial No. : 09/966,740
Filed : October 1, 2001
Title : LIGHT EMITTING DEVICE

Art Unit : 2875
Examiner : Dalei Dong

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Commissioner for Patents
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REPLY TO ACTION OF DECEMBER 11, 2003

In reply to the office action of December 11, 2003, applicants submit the following remarks.

Claims 1-49 are pending with claims 1, 6, 12, 18, 23, 27, 33, and 42 being independent.

Independent claim 1, along with dependent claims 2-5, have been rejected as being unpatentable over Sakaguchi (U.S. Patent No. 5,990,615) in view of Fujita (U.S. Patent No. 5,962,962). Applicants request reconsideration and withdrawal of this rejection because neither Sakaguchi, Fujita, nor any proper combination of the two describes or suggests a barrier film on which is formed an absorption film on which is formed a passivation film, as recited in claim 1.

As noted in applicants' prior response, Sakaguchi describes an EL element that is covered by an insulative protecting layer 8 that is surrounded by an inert liquid 12 contained within a metal or glass sealing member 9. See Sakaguchi at Fig. 1 and col. 2, line 35 to col. 3, line 15. Thus, while Sakaguchi's protecting layer 8 arguably could be said to correspond to the barrier film recited in claim 1, Sakaguchi nowhere describes or suggests anything comparable to the recited absorption film and passivation film. Moreover, while Sakaguchi describes a dehydrating agent and an oxygen absorber, these materials are not included as part of an absorption film. Rather, they are included as part of the inert liquid 12. See Sakaguchi at col. 3, lines 9-15.

Similarly, Fujita describes an organic EL device 10 that is present in a space formed by the concave portion of a housing material 18 fixed onto a glass substrate 11. The remainder of the space is filled with an inert liquid layer 20 that then surrounds the organic EL device. See Fujita at col. 17, lines 4-26. At col. 12, lines 3-6, Fujita notes that a protective layer may be

formed on the periphery of the device to prevent the infiltration of water into the device. The protective layer of Fujita performs a similar function as the insulating protecting layer 8 of Sakaguchi. Accordingly, to the extent that one were to combine Sakaguchi and Fujita, it would be to replace Sakaguchi's insulative protecting layer 8 with Fujita's protective layer, which would not result in the multi-film arrangement recited in the claims.

Nothing in Sakaguchi or Fujita describes or suggests a multi-film arrangement such as is recited in claim 1. Accordingly, since both Sakaguchi and Fujita fail to describe or suggest a multi-film arrangement, no combination of the two could describe or suggest such an arrangement, and the rejection of claim 1 and its dependent claims should be withdrawn.

Claims 6-17 and 23-41, including independent claims 6, 12, 23, 27 and 33, and their dependent claims 7-11, 13-17, 24-26, 28-32 and 34-41, have been rejected as being unpatentable over Sakaguchi in view of Fujita and Shi (U.S. Patent No. 5,811,177).

Similarly to claim 1, independent claims 6 and 12 recite arrangements in which a passivation film is formed over an absorption film; independent claim 23 recites an arrangement in which a passivation film is formed over an inorganic hygroscopic film; and independent claims 27 and 33 recite arrangements in which a passivation film is formed on an inorganic hygroscopic film which is formed on a barrier film.

As discussed above with respect to claim 1, neither Sakaguchi nor Fujita describes or suggests a multi-film arrangement such as is recited in the claims. Shi describes an arrangement in which a buffer layer 22 is covered with a thermal expansion layer 24 that, in turn, is covered with a low permeability inorganic layer 26.

With respect to claims 6, 12 and 23, and their dependent claims, applicants request reconsideration and withdrawal of the rejection because Shi, like Sakaguchi and Fujita, fails to describe or suggest a passivation film formed over an absorption film or an inorganic hygroscopic film. Even assuming for sake of argument that Sakaguchi or Fujita describes the recited absorption film or inorganic hygroscopic film, nothing in Sakaguchi, Shi, or Fujita would have motivated one of ordinary skill in the art to employ one of the layers of Shi in the system of Sakaguchi or Fujita.

With respect to claims 27 and 33, and their dependent claims, applicants request reconsideration and withdrawal of the rejection because Shi, like Sakaguchi and Fujita, fails to describe or suggest a passivation film formed on an inorganic hygroscopic film which is formed on a barrier film. In particular, nothing in Sakaguchi, Shi, or Fujita would have motivated one of ordinary skill in the art to employ the three layers of Shi in the system of Sakaguchi or Fujita, or to modify those layers to include the recited barrier, hygroscopic and passivation films arranged in the manner recited in the claims.

Claims 18-22 and 42-49, including independent claims 18 and 42, have been rejected as being unpatentable over Tang in view of Fujita.

Independent claim 18 recites a light emitting device that includes a substrate, a TFT formed over the substrate, an EL element electrically connected with the TFT, and an absorption film formed over the EL element such that the EL element is interposed between the substrate and the absorption film. While Tang discloses TFTs and EL elements that are covered by a passivation layer, Tang does not describe or suggest an absorption layer. Moreover, nothing in Tang or Fujita would have motivated one of ordinary skill in the art to replace Tang's passivation layer with a protective layer formed from a material having water absorbing properties, as described by Fujita. For at least this reason, applicant requests reconsideration and withdrawal of the rejection of claims 18-22.

Independent claim 42 recites, among other elements, a plurality of EL elements and a driver circuit over which is formed an inorganic hygroscopic film, with the EL elements being positioned in a space between two substrates that is hermetically sealed by a sealant. Applicant requests reconsideration and withdrawal of the rejection of claims 42-49 because neither Tang, Fujita, nor any combination of the two, describes or suggests EL elements and an inorganic hygroscopic film arranged between two substrates in a manner such as is recited in claim 42. Indeed, neither Tang, Fujita, nor any combination of the two, appears to describe or suggest using two substrates.

Applicant submits that all claims are in condition for allowance.

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Enclosed is a check in the amount of \$750 (\$420 for the Petition for Extension of Time fee and \$330 for the Notice of Appeal fee). Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

Date: 5/11/04



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